

# A blind man's bluff: choice blindness in eyewitness testimony

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## Summary



## SUMMARY

The present dissertation aims to investigate the effect of choice blindness in the eyewitness context. Choice blindness refers to the difficulty people have in detecting manipulations in their own previously made choices. In a typical choice blindness task participants first indicate a preference. Then, they are presented either with their original response (non-manipulated trial) or with a response that is inconsistent with their own (manipulated trial) and they are asked to explain the reasons for their choice. Finally, participants are informed about the possibility of a manipulation and are asked to indicate if that was true for them. The typical finding is that the overwhelming majority of participants remain unaware to this surreptitious change in the outcome of their decision and accept as their own a decision they never made. Inspired by this intriguing effect in the present dissertation we aimed to: 1) establish the relevance of choice blindness in eyewitness testimony, 2) explore the moderating factors of the effect of blindness in eyewitness testimony, and 3) unravel the mechanism underlying choice blindness. To that end, we modified the choice blindness paradigm to incorporate manipulations of eyewitness identification decisions and witness statements.

In Part 1 of this dissertation, we focused on establishing the occurrence of choice blindness in earwitnesses and eyewitnesses. Examining the effect of blindness manipulations on earwitnesses in Chapter 2, we found that choice blindness transfers to auditory stimuli, with the overwhelming majority of participants being blind to our manipulations (71-81%). Following the successful application of blindness manipulations for auditory stimuli, in Chapter 3 we aimed to identify the conditions under which blindness occurs in facial recognition decisions. In five Experiments, participants watched four mock crime videos and made choices that were either evaluative (i.e., choice based on sympathy; Experiment 1) or absolute in nature (i.e., identification decision; Experiments 2a-c, 3). Our hypothesis that in an eyewitness setting, choice blindness rates would depend on decision type (evaluative vs. absolute) was only partially supported (Experiment 1). In Experiments 2a-c, where we employed simple recognition procedures, we found virtually no or modest blindness rates (0-35%) in student and non-student samples. To increase the ecological validity of our findings, in Experiment 3 we inserted a 48 hrs interval between the presentation of the recognition task and the presentation of the manipulated outcome. Under these conditions blindness rates increased dramatically (39.4-68.3%) compared with the previous three recognition experiments.

The second part (Part 2) of the dissertation is devoted to establishing the occurrence of the effect under naturalistic encoding conditions; hence affirming its relevance for the judicial system. Therefore, we conducted two additional experiments employing a

field study methodology. Using staged non-criminal (Chapter 4) and criminal (Chapter 5) events, we replicated our laboratory findings and showed that blindness for identification decisions can occur at an alarmingly high level in real life settings (41-69%). Moreover, we extended our knowledge by demonstrating that blindness phenomena occur for choosers and, to a lesser extent, nonchoosers, as well as for target-present and, to a lesser extent, target-absent lineups.

In light of the stable nature of blindness for identification decisions, in Part 3 we aimed to investigate whether blindness could be relevant for other aspects of eyewitness testimony. In Chapter 6 we examined whether the increased cognitive effort that is inherent in other-race identifications would increase blindness rates for other-compared with own-race identifications. Indeed, participants who made other-race identifications were more likely to be blind to the manipulations than participants who made own-race identifications. Therefore, these findings indicate that some estimator variables can facilitate blindness. In Chapter 7, in a series of three studies, we examined the ability of eyewitnesses to detect manipulations introduced to their written statements. Results revealed that although blindness varied as a function of the delay between giving testimony and being presented with the manipulated statement, a substantial proportion of manipulations in eyewitnesses' written statements went undetected even within minutes after giving testimony.

Finally, in Part 4 we attempted to understand the mechanism behind choice blindness. In Chapter 8 we focused on the role of self-relevance as a moderator, but found only weak support for the hypothesis that self-relevance can decrease blindness rates. In Chapter 9, we investigated memory decay as a potential candidate. We hypothesized that the presentation of the manipulated outcome should hinder the recollection of the memory trace of the original choice. Contrary to our assumption, participants were able to recall their original choice with reasonable precision (recall accuracy: 46.2%-85.4%). These results provide interesting insights for understanding choice blindness, as they rule out potential mechanisms as memory decay. However, based on the findings of the present dissertation it would be hard to conclude on the mechanism underlying choice blindness. Nonetheless, we suggest that we can draw firm conclusions about the moderators of blindness in the eyewitness context. In fact, we believe that ambiguity is the key moderator. That is, ambiguous decisions result in participants being less likely to detect the discrepancy between the original choice and the manipulated outcome. In the context of eyewitness testimony, the longer retention interval as well as the heightened similarity between the original choice and the presentation of the manipulate outcome and potentially memory decay can be conceptualized as factors that increase the ambiguity surrounding a decision, which in turn increases blindness rates.

The present findings indicate that a large proportion of eyewitness fail to detect mistakes and changes in their identification decisions and witness statements. Clearly, mistaken or deliberate manipulations even of minor details can impede the accurate reconstruction of an event and possibly incriminate innocent suspects. Therefore, the issues emerging from our line of work directly appeal to and emphasize the importance of blind lineup administration procedures that leave little room for surreptitious manipulations. Additionally, our findings underscore the importance of camera recordings during identification and interviewing.

To conclude, the fact that witnesses can be blind to surreptitious manipulations on their identification decisions and witness statements may daunt researchers dealing with eyewitness memory and decision making. Indeed, the findings of the present dissertation challenge the view of humans as deliberate agents and raise questions about decision making. Yet, we believe we have demonstrated that research on blindness phenomena is critical for the legal practice and we hope to see more research in this field in the near future.